



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Alcohol, Drug Abuse, and  
Mental Health Administration  
National Institute of Mental Health  
Intramural Research Program  
Bethesda MD 20892

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Dear Ken:

Thanks for your letter of December 13, 1992. I have been slow in responding because I am trying to complete two huge chapters for a textbook of Human Physiology, which were due at the end of 1992. I have not yet sent them out, but they are close to being completed.

In reference to your question about my statement "All units must be in molecular concentrations of methylglucose and glucose", I mean that they should be in units of mmoles/liter or mM (or equivalents), in order to get your final answer for  $V_T$  and  $K_T$  in molecular units. If you use only radioactive units, then your final units will relate only to the transport of radioactivity, which is not really what you want. It is very simple for you to convert your counting rates or DPM into molecular units by using the original specific activity of methylglucose. The supplier usually supplies you with information on  $\mu\text{Ci}/\mu\text{mol}$  or  $\text{mCi}/\text{mmol}$ . If you divide  $\mu\text{Ci}/\text{ml}$  by  $\mu\text{Ci}/\mu\text{mole}$ , you will come out with  $\text{mol}/\text{ml}$ . I hope this clarifies this issue for you. If not, do not hesitate to ask.

We are all making our plans for the trip to Japan. When they are completed, we will let you know. At the present time it is almost certain that my wife and son will accompany me and we will come to Tokyo for several days after the meeting in Sendai.

With best regards.

Sincerely, yours,

Louis Sokoloff, M.D.  
Chief, Laboratory of Cerebral  
Metabolism, National Institute  
of Mental Health